



# Case Study of MACED

## Keys to Success



### Project Description



### Economic Value



### Challenges & Advice



### Benefits



### Stewardship Meaning



Staff members at the Mountain Association for Community Economic Development, also known as MACED, in Berea, are making the office building green and cutting waste. The five-member MACED O-Team works to make the operations reflect MACED's values and demonstrates the promise of sustainable development.

For one of its KY EXCEL projects, MACED's thirty office employees bring their coffee grounds, paper products and waste from daily food items to the collection bins, which are located in the two office kitchens.

"Each day, I use a digital scale to weigh the contents of the bins before composting them outside," says Irene DeLuna. "The daily average collected from the bins is three pounds."

A raised garden of lettuce, onions, carrots, radishes, broccoli and tomatoes has been very successful and provides healthy snacks for employees.

Other projects include switching to energy-efficient lighting, replacing Christmas lights with LED bulbs, using low-VOC paint on the walls, and renovating the office building, making it environmentally green and cost-efficient by replacing magnetic light ballasts with electronic ballasts and changing to bulbs with high-performance lighting.

"The upgrades reduced the office's carbon footprint by an estimated 12,522 pounds per year, saving MACED approximately \$460 annually."

In one office, 3M film, which is an invisible thermal barrier, was placed over the windows to block the heat of the sun in the summer. The film cannot be seen and allows the light to flow inside.

Old carpet was replaced with 100 percent recycled floor tiles made from tires. When a tile is damaged or stained, it can be replaced, saving a lot of carpet replacement.

Compostable plates, cups and utensils are used for office potluck dinners and other special occasions. Fair trade, organic coffee beans and local spring water in five-gallon jugs, rather than 20-ounce bottles, are purchased.

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In 2011, MACED became carbon neutral by tracking all carbon dioxide emitted that was unavoidable, i.e. carbon dioxide emitted by airline and company vehicle travel, as well as electric use. Then carbon offsets generated from MACED's Stewards of Appalachia project will be purchased.

More natural lighting was created by replacing two back doors with others having windows at the top, reducing the use of electric lighting and improving staff morale by diminishing the closed-in feeling.


 "The upgrades reduced the office's carbon footprint by an estimated 12,522 pounds per year, saving MACED approximately \$460 annually. It also eliminated the flicker associated with tubes energized by the older magnetic




Thermal blinds help to keep heating and cooling costs at a minimum.

ballasts, providing better quality and brighter lighting," says Energy Specialist Josh Bills.

When Christmas lights were replaced with LED bulbs, which will last for 20 years or more, the office's holiday lighting bill was reduced by 90 percent.

 There have been some dilemmas with the composting system. The biodegradable bags used to collect food scraps did not break down in the bin since they are for more industrial-sized compost piles. Team members tackled the not-so-pleasant task of removing the bags from the compost, which created a more ideal, aerobic state.


Team members suggest, "Take time to research your project ideas; look to other organizations doing similar projects. Ask their advice. Discuss it with other staff members. We've found alternatives and solved problems with research and discussion. It's okay to make mistakes."

 MACED's efforts to be more sustainable reflect the employees' desire to remember that they are part of something larger. Team members



Plastic grocery bags in the kitchens collect food scraps for composting.

say the KY EXCEL project pushes their organization to be innovative in terms of being more sustainable.

 MACED is an organization that not only promotes sustainable development, but environmental stewardship, as well. Employees believe it is important to be consistent with those values, including striving to make a more sustainable work environment.

"It's wonderful to work in a green place that is also beautiful," says Bills.

**Helpful Hint:** Homes and offices offer multiple opportunities to be sustainable. Small projects, like composting and changing light bulbs, can create impressive results.

